

342-3PCT.ST25.txt
SEQUENCE LISTING

<110> Sahin Dr., Ugur
Türeci Dr., Özlem
Koslowski Dr., Michael

<120> Genetic products differentially expressed in tumors and use thereof

<130> 342-3PCT

<160> 100

<170> PatentIn version 3.1

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35 40 45

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Leu Gln His Gly Ser Leu Phe Phe Ser Thr Ser Lys Ile Thr Ser Gly
65 70 75 80

Lys Asp Tyr Ser Val Ser Ala Asn Ser Arg Ile Val Ile Val Thr Ala
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Gly Ala Arg Gln Gln Glu Gly Glu Thr Arg Leu Ala Leu Val Gln Arg
100 105 110

Asn Val Ala Ile Met Lys Ser Ile Ile Pro Ala Ile Val His Tyr Ser
115 120 125

Pro Asp Cys Lys Ile Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
130 135 140

Tyr Ile Val Trp Lys Ile Ser Gly Leu Pro Val Thr Arg Val Ile Gly
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Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu
165 170 175

Lys Leu Gly Val His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu
180 185 190

His Gly Asp Ser Ser Val Pro Leu Trp Ser Gly Val Asn Val Ala Gly
195 200 205

Val Ala Leu Lys Thr Leu Asp Pro Lys Leu Gly Thr Asp Ser Asp Lys
210 215 220

Glu His Trp Lys Asn Ile His Lys Gln Val Ile Gln Ser Ala Tyr Glu
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Ile Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val
245 250 255

Met Asp Leu Val Gly Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro
260 265 270

Val Ser Thr Met Val Lys Gly Leu Tyr Gly Ile Lys Glu Glu Leu Phe
275 280 285

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35 40 45

Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu Lys Leu Gly Val
50 55 60

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His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu His Gly Asp Ser
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Ser Val Pro Leu Trp Ser Gly Val Asn Val Ala Gly Val Ala Leu Lys
85 90 95

Thr Leu Asp Pro Lys Leu Gly Thr Asp Ser Asp Lys Glu His Trp Lys
100 105 110

Asn Ile His Lys Gln Val Ile Gln Ser Ala Tyr Glu Ile Ile Lys Leu
115 120 125

Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val Met Asp Leu Val
130 135 140

Gly Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro Val Ser Thr Met
145 150 155 160

Val Lys Gly Leu Tyr Gly Ile Lys Glu Glu Leu Phe Leu Ser Ile Pro
165 170 175

Cys Val Leu Gly Arg Asn Gly Val Ser Asp Val Val Lys Ile Asn Leu
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35 40 45

Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu Lys Leu Gly Val
50 55 60

His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu His Gly Asp Ser
65 70 75 80

Ser Gly Ile Ile Trp Asn Lys Arg Arg Thr Leu Ser Gln Tyr Pro Leu
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Gly Val Ser Asp Val Val Lys Ile Asn Leu Asn Ser Glu Glu Glu Ala
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35 40 45
Ala Leu Val Asp Val Ala Leu Asp Lys Leu Lys Gly Glu Met Met Asp
50 55 60
Leu Gln His Gly Ser Leu Phe Phe Ser Thr Ser Lys Ile Thr Ser Gly
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Lys Asp Tyr Ser Val Ser Ala Asn Ser Arg Ile Val Ile Val Thr Ala
85 90 95

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Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu
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Lys Leu Gly Val His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu
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342-3PCT.ST25.txt

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Cys Leu Arg Cys Cys Glu Asn
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ctttccaacc ctgccacatg ttcatatata cttaaactat cctaaatgtt cccttgaagt 2040
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<210> 21

<211> 2222

<212> DNA

<213> Homo sapiens

<400> 21

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gcgcccgaga gaatgttggg ccgacgacac aagacctcag acttgtgtta ttctagcagc 180
tgaacacacc ccaggctctt ctgaccggca gtggctctgg aagcagctctg gtgtatagag 240
ttatggattc actaccagat tctactgtat gctcttgaca actatgacca caatgggtcca 300
cccacaaatg aattatcagg agtgaaccca gaggcacgta tgaatgaaag tcctgatccg 360
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342-3PCT.ST25.txt

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gttgaagatg ctgaaaatgt tgcttcatat gacagcaaga ttaagaaaat tgtgcattca	600
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<210> 22

<211> 551

342-3PCT.ST25.txt

<212> PRT

<213> Homo sapiens

<400> 22

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Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
35      40      45
Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
50      55      60
Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
65      70      75      80
Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
85      90      95
Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
100     105     110
Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
115     120     125
Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
130     135     140
Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
145     150     155     160
Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr
165     170     175
Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
180     185     190
Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
195     200     205
Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
210     215     220
Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
225     230     235     240

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342-3PCT.ST25.txt

Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
245 250 255

Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
260 265 270

Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg
275 280 285

Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile
290 295 300

Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys
305 310 315 320

Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile
325 330 335

His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe
340 345 350

Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr
355 360 365

Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly
370 375 380

Val Glu Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala Gln Val
385 390 395 400

Lys His Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu Phe Ile
405 410 415

Lys His Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp Leu Lys
420 425 430

Ile Gln Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu
435 440 445

Gly Lys Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile
450 455 460

Asp Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe
465 470 475 480

Phe Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe
485 490 495

Trp Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys
500 505 510

342-3PCT.ST25.txt

Asn Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro
515 520 525

Ser Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser
530 535 540

Asp Val Val Ala Gly Ser Asp
545 550

<210> 23

<211> 533

<212> PRT

<213> Homo sapiens

<400> 23

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
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Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45

Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60

Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
115 120 125

Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
130 135 140

Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
145 150 155 160

Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
165 170 175

342-3PCT.ST25.txt

Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
180 185 190

Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
195 200 205

Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
210 215 220

Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
225 230 235 240

Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
245 250 255

His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
260 265 270

Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
275 280 285

His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
290 295 300

Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
305 310 315 320

Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe Leu Ile
325 330 335

Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr Phe Gly
340 345 350

Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly Val Glu
355 360 365

Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala Gln Val Lys His
370 375 380

Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu Phe Ile Lys His
385 390 395 400

Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp Leu Lys Ile Gln
405 410 415

Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu Gly Lys
420 425 430

Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp Val
435 440 445

342-3PCT.ST25.txt
Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe Tyr
450 455 460

Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp Leu
465 470 475 480

His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn Glu
485 490 495

Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser Asp
500 505 510

Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp Val
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Val Ala Gly Ser Asp
530

<210> 24

<211> 569

<212> PRT

<213> Homo sapiens

<400> 24

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
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20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
35 40 45

Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
50 55 60

Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
65 70 75 80

Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
85 90 95

Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
100 105 110

Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
115 120 125

342-3PCT.ST25.txt

Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
130 135 140

Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
145 150 155 160

Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr
165 170 175

Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
180 185 190

Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
195 200 205

Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
210 215 220

Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
225 230 235 240

Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
245 250 255

Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
260 265 270

Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Met Tyr
275 280 285

Ile Thr Leu Tyr Cys Ala Thr Val Asp Arg Lys Gln Ile Thr Ala Arg
290 295 300

Glu Arg Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile
305 310 315 320

Met Ile Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe
325 330 335

Thr Lys Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val
340 345 350

Ala Ile His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys
355 360 365

Ala Phe Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu
370 375 380

Tyr Tyr Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe
385 390 395 400

342-3PCT.ST25.txt

Gln Gly Val Glu Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala
405 410 415

Gln Val Lys His Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu
420 425 430

Phe Ile Lys His Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp
435 440 445

Leu Lys Ile Gln Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile
450 455 460

Ser Leu Gly Lys Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile
465 470 475 480

Leu Ile Asp Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val
485 490 495

Gln Phe Phe Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe
500 505 510

Tyr Phe Trp Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu
515 520 525

Pro Lys Asn Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile
530 535 540

Tyr Pro Ser Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr
545 550 555 560

Ser Ser Asp Val Val Ala Gly Ser Asp
565

<210>	25
<211>	21
<212>	DNA
<213>	Artificial sequence

<400> 25
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21

<210>	26
<211>	21
<212>	DNA
<213>	Artificial sequence

342-3PCT.ST25.txt

<400> 26
caacatctga gacaccattc c 21

<210> 27

<211> 21

<212> DNA

<213> Artificial sequence

<400> 27
tggatgtcac tctcatcctt g 21

<210> 28

<211> 21

<212> DNA

<213> Artificial sequence

<400> 28
ccatagttcc tgttctatct g 21

<210> 29

<211> 2192

<212> DNA

<213> Homo sapiens

<400> 29
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gcaaaactca ggacctattg tacaatatct ggatccaatg tcagatcgca tctcacacaa 720
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342-3PCT.ST25.txt

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aaaaatcttg ttccaaaatc cagattctaa aatgtggagg cactgcaagg tctcagatag 960
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gaagtaaaac attttaatta aagaaaaaaa aa 2192

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<210> 30
 <211> 568
 <212> PRT
 <213> Homo sapiens

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 Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Arg Lys Gln
 20 25 30

342-3PCT.ST25.txt

Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Gln His Lys
50 55 60

Val Thr Leu His Met Ile Thr Glu Arg Asp Pro Lys Arg Asp Tyr Thr
65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Pro
100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Leu Phe Pro
115 120 125

Glu Leu Gln Asp Leu Ser Ser Ser Leu Lys Lys Pro Leu Cys Lys Leu
130 135 140

Gln Asp Leu Leu Tyr Asn Ile Trp Ile Gln Cys Gln Ile Ala Ser His
145 150 155 160

Thr Ile Thr Gly His Leu Gln His Pro Arg Ser Pro Met Ala Pro Ile
165 170 175

Ile Ile Ser Gln Arg Thr Ala Ser Gln Leu Ala Ala Pro Ile Arg Ile
180 185 190

Pro Gln Val His Thr Met Asp Ser Ser Gly Lys Ile Thr Leu Thr Pro
195 200 205

Val Val Ile Leu Thr Gly Tyr Met Asp Glu Glu Leu Arg Lys Lys Ser
210 215 220

Cys Ser Lys Ile Gln Ile Leu Lys Cys Gly Gly Thr Ala Arg Ser Gln
225 230 235 240

Ile Ala Glu Lys Lys Thr Arg Lys Gln Leu Lys Asn Asp Ile Ile Phe
245 250 255

Thr Asn Ser Val Glu Ser Leu Lys Ser Ala His Ile Lys Glu Pro Glu
260 265 270

Arg Glu Gly Lys Gly Thr Asp Leu Glu Lys Asp Lys Ile Gly Met Glu
275 280 285

Val Lys Val Asp Ser Asp Ala Gly Ile Pro Lys Arg Gln Glu Thr Gln
290 295 300

342-3PCT.ST25.txt

Leu Lys Ile Ser Glu Asp Glu Tyr Thr Thr Arg Thr Gly Ser Pro Asn
305 310 315 320

Lys Glu Lys Cys Val Arg Cys Thr Lys Arg Thr Gly Val Gln Val Lys
325 330 335

Lys Ser Glu Ser Gly Val Pro Lys Gly Gln Glu Ala Gln Val Thr Lys
340 345 350

Ser Gly Leu Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys Ser
355 360 365

Glu Met Gly Val Pro Arg Arg Gln Glu Ser Gln Val Lys Lys Ser Gln
370 375 380

Ser Gly Val Ser Lys Gly Gln Glu Ala Gln Val Lys Lys Arg Glu Ser
385 390 395 400

Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Leu Lys
405 410 415

Val Pro Lys Gly Gln Glu Gly Gln Val Glu Lys Thr Glu Ala Asp Val
420 425 430

Pro Lys Glu Gln Glu Val Gln Glu Lys Lys Ser Glu Ala Gly Val Leu
435 440 445

Lys Gly Pro Glu Ser Gln Val Lys Asn Thr Glu Val Ser Val Pro Glu
450 455 460

Thr Leu Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Leu Lys Gly
465 470 475 480

Gln Glu Ala Gln Glu Lys Lys Glu Ser Phe Glu Asp Lys Gly Asn Asn
485 490 495

Asp Lys Glu Lys Glu Arg Asp Ala Glu Lys Asp Pro Asn Lys Lys Glu
500 505 510

Lys Gly Asp Lys Asn Thr Lys Gly Asp Lys Gly Lys Asp Lys Val Lys
515 520 525

Gly Lys Arg Glu Ser Glu Ile Asn Gly Glu Lys Ser Lys Gly Ser Lys
530 535 540

Arg Arg Arg Gln Ile Gln Glu Gly Ser Thr Thr Lys Lys Trp Lys Ser
545 550 555 560

Lys Asp Lys Phe Phe Lys Gly Pro
565

342-3PCT.ST25.txt

<210> 31
<211> 1686
<212> DNA
<213> Homo sapiens

<400> 31
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agttcagaac aaagtgctag acttctggac tatgaggatg gtagaggatc ccgacatgca 180
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atgcaattca cagcccttat tcccgagct acaggaccta tcaagctctc tcaaaaaacc 420
attgtgcaaa ctccaggacc tattgtacaa tatcctggat ccaatgctgg tccaccttca 480
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agttctggaa aaatcacact gactcctgtg gttatattaa caggttacat ggatgaagaa 660
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cagaatagcc gagaagaaaa caaggaagca ctaaagaatg acatcatatt tacgaattct 780
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ttagagaaaag acaaaatagg aatggaggtc aaggtagaca gtgacgctgg aataccaaaa 900
agacaggaag cccaactaaa aatcagttag atgagtatac cacaaggaca gggagcccaa 960
ataaagaaaa gtgtgtcaga tgtaccaaga ggacaggagt cccaagtaaa gaagagttag 1020
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aaggagagag atgcagagaa agatccaaat aaaaaagaaa aagggtgaca aaacacaaaa 1560
ggtgacaaaag gaaaggacaa agttaaggga aagagagaat cagaaatcaa tggtgaaaaa 1620
tcaaaaggct cgaaggggc gaaggcaaat acaggaagga agtacaacaa aaaagtggaa 1680

342-3PCT.ST25.txt

gagtaa

1686

<210> 32

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 32

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agttcagaac aaagtgctag acttctggac tatgaggatg gtagaggatc ccgacatgca      180
tattcaacac aaagtgacac ttcatgtgat aaccgagaga gatccaaaag agattacaca      240
ccatcaacca actctctagc actgtctcga tcaagtattg ctttacctca aggatccatg      300
agtagtataa aatgtttaca aacaactgaa gaacttcctt ccagaactgc aggagccatg      360
atgcaattca cagcccctat tcccggagct acaggaccta tcaagctctc tcaaaaaacc      420
attgtgcaaa ctccaggacc tattgtacaa tatcctggac ccaatgtcag atcgcatcct      480
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gaagcccagg taaagaagag ggagtcagtt gtactgaaag gacaggaagc ccaggtagag     1260
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aagagtgagt caggtgtact aaaaggacag gaagccaag aaaagaagga gagttttgag     1500
gataaaggaa ataatgataa agaaaaggag agagatgcag agaaagatcc aaataaaaaa     1560
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342-3PCT.ST25.txt

gaatcagaaa tcaatggtga aaaatcaaaa ggctcgaaaa gggcgaaggc aaatacagga 1680
aggaagtaca acaaaaaagt ggaagagtaa 1710

<210> 33

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 33
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tattcaacac aaagtgtgag atccaaaaga gattacacac catcaaccaa ctctctagca 240
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gaatcccaag taaagaagag tgagtcaggt gtactaaaag gacaggaagc ccaagaaaag 1440
aaggagagtt ttgaggataa aggaataat gataaagaaa aggagagaga tgcagagaaa 1500
gatccaaata aaaaagaaaa aggtgacaaa aacacaaaag gtgacaaagg aaaggacaaa 1560

342-3PCT.ST25.txt

gttaaaggaa agagagaatc agaaatcaat ggtgaaaaat caaaaggctc gaaaagggcg 1620
aaggcaaata caggaaggaa gtacaacaaa aaagtggaag agtaa 1665

<210> 34
<211> 561
<212> PRT
<213> Homo sapiens

<400> 34

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
1 5 10 15

Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Cys Lys Gln
20 25 30

Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
50 55 60

Ser Asp Thr Ser Tyr Asp Asn Arg Glu Arg Ser Lys Arg Asp Tyr Thr
65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Pro
100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Pro Ile Pro
115 120 125

Gly Ala Thr Gly Pro Ile Lys Leu Ser Gln Lys Thr Ile Val Gln Thr
130 135 140

Pro Gly Pro Ile Val Gln Tyr Pro Gly Ser Asn Ala Gly Pro Pro Ser
145 150 155 160

Ala Pro Arg Gly Pro Pro Met Ala Pro Ile Ile Ile Ser Gln Arg Thr
165 170 175

Ala Ser Gln Leu Ala Ala Pro Ile Ile Ile Ser Gln Arg Thr Ala Arg
180 185 190

Ile Pro Gln Val His Thr Met Asp Ser Ser Gly Lys Ile Thr Leu Thr
195 200 205

342-3PCT.ST25.txt

Pro Val Val Ile Leu Thr Gly Tyr Met Asp Glu Glu Leu Ala Lys Lys
 210 215 220

Ser Cys Ser Lys Ile Gln Ile Leu Lys Cys Gly Gly Thr Ala Arg Ser
 225 230 235 240

Gln Asn Ser Arg Glu Glu Asn Lys Glu Ala Leu Lys Asn Asp Ile Ile
 245 250 255

Phe Thr Asn Ser Val Glu Ser Leu Lys Ser Ala His Ile Lys Glu Pro
 260 265 270

Glu Arg Glu Gly Lys Gly Thr Asp Leu Glu Lys Asp Lys Ile Gly Met
 275 280 285

Glu Val Lys Val Asp Ser Asp Ala Gly Ile Pro Lys Arg Gln Glu Thr
 290 295 300

Gln Leu Lys Ile Ser Glu Met Ser Ile Pro Gln Gly Gln Gly Ala Gln
 305 310 315 320

Ile Lys Lys Ser Val Ser Asp Val Pro Arg Gly Gln Glu Ser Gln Val
 325 330 335

Lys Lys Ser Glu Ser Gly Val Pro Lys Gly Gln Glu Ala Gln Val Thr
 340 345 350

Lys Ser Gly Leu Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys
 355 360 365

Ser Glu Met Gly Val Pro Arg Arg Gln Glu Ser Gln Val Lys Lys Ser
 370 375 380

Gln Ser Gly Val Ser Lys Gly Gln Glu Ala Gln Val Lys Lys Arg Glu
 385 390 395 400

Ser Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Leu
 405 410 415

Lys Val Pro Lys Gly Gln Glu Gly Gln Val Glu Lys Thr Glu Ala Asp
 420 425 430

Val Pro Lys Glu Gln Glu Val Gln Glu Lys Lys Ser Glu Ala Gly Val
 435 440 445

Leu Lys Gly Pro Glu Ser Gln Val Lys Asn Thr Glu Val Ser Val Pro
 450 455 460

Glu Thr Leu Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Leu Lys
 465 470 475 480

342-3PCT.ST25.txt

Gly Gln Glu Ala Gln Glu Lys Lys Glu Ser Phe Glu Asp Lys Gly Asn
485 490 495

Asn Asp Lys Glu Lys Glu Arg Asp Ala Glu Lys Asp Pro Asn Lys Lys
500 505 510

Glu Lys Gly Asp Lys Asn Thr Lys Gly Asp Lys Gly Lys Asp Lys Val
515 520 525

Lys Gly Lys Arg Glu Ser Glu Ile Asn Gly Glu Lys Ser Lys Gly Ser
530 535 540

Lys Arg Ala Lys Ala Asn Thr Gly Arg Lys Tyr Asn Lys Lys Val Glu
545 550 555 560

Glu

<210> 35

<211> 569

<212> PRT

<213> Homo sapiens

<400> 35

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
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Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Arg Lys Gln
20 25 30

Ser Glu Met His Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
50 55 60

Ser Asp Thr Ser Cys Asp Asn Arg Glu Arg Ser Lys Arg Asp Tyr Thr
65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Leu
100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Pro Ile Pro
115 120 125

342-3PCT.ST25.txt

Gly Ala Thr Gly Pro Ile Lys Leu Ser Gln Lys Thr Ile Val Gln Thr
130 135 140

Pro Gly Pro Ile Val Gln Tyr Pro Gly Pro Asn Val Arg Ser His Pro
145 150 155 160

His Thr Ile Thr Gly Pro Pro Ser Ala Pro Arg Gly Pro Pro Met Ala
165 170 175

Pro Ile Ile Ile Ser Gln Arg Thr Ala Ser Gln Leu Ala Ala Pro Ile
180 185 190

Ile Ile Ser Gln Arg Thr Ala Arg Ile Pro Gln Val His Thr Met Asp
195 200 205

Ser Ser Gly Lys Thr Thr Leu Thr Pro Val Val Ile Leu Thr Gly Tyr
210 215 220

Met Asp Glu Glu Leu Ala Lys Lys Ser Cys Ser Lys Ile Gln Ile Leu
225 230 235 240

Lys Cys Gly Gly Thr Ala Arg Ser Gln Asn Ser Arg Glu Glu Asn Lys
245 250 255

Glu Ala Leu Lys Asn Asp Ile Ile Phe Thr Asn Ser Val Glu Ser Leu
260 265 270

Lys Ser Ala His Ile Lys Glu Pro Glu Arg Glu Gly Lys Gly Thr Asp
275 280 285

Leu Glu Lys Asp Lys Ile Gly Met Glu Val Lys Val Asp Ser Asp Ala
290 295 300

Gly Ile Pro Lys Arg Gln Glu Thr Gln Leu Lys Ile Ser Glu Met Ser
305 310 315 320

Ile Pro Gln Gly Gln Gly Ala Gln Ile Lys Lys Ser Val Ser Asp Val
325 330 335

Pro Arg Gly Gln Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Pro
340 345 350

Lys Gly Gln Glu Ala Gln Val Thr Lys Ser Gly Leu Val Val Leu Lys
355 360 365

Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Met Gly Val Pro Arg Arg
370 375 380

Gln Glu Ser Gln Val Lys Lys Ser Gln Ser Gly Val Ser Lys Gly Gln
385 390 395 400

342-3PCT.ST25.txt

Glu Ala Gln Val Lys Lys Arg Glu Ser Val Val Leu Lys Gly Gln Glu
405 410 415
Ala Gln Val Glu Lys Ser Glu Leu Lys Val Pro Lys Gly Gln Glu Gly
420 425 430
Gln Val Glu Lys Thr Glu Ala Asp Val Pro Lys Glu Gln Glu Val Gln
435 440 445
Glu Lys Lys Ser Glu Ala Gly Val Leu Lys Gly Pro Glu Ser Gln Val
450 455 460
Lys Asn Thr Glu Val Ser Val Pro Glu Thr Leu Glu Ser Gln Val Lys
465 470 475 480
Lys Ser Glu Ser Gly Val Leu Lys Gly Gln Glu Ala Gln Glu Lys Lys
485 490 495
Glu Ser Phe Glu Asp Lys Gly Asn Asn Asp Lys Glu Lys Glu Arg Asp
500 505 510
Ala Glu Lys Asp Pro Asn Lys Lys Glu Lys Gly Asp Lys Asn Thr Lys
515 520 525
Gly Asp Lys Gly Lys Asp Lys Val Lys Gly Lys Arg Glu Ser Glu Ile
530 535 540
Asn Gly Glu Lys Ser Lys Gly Ser Lys Arg Ala Lys Ala Asn Thr Gly
545 550 555 560
Arg Lys Tyr Asn Lys Lys Val Glu Glu
565

<210> 36
<211> 554
<212> PRT
<213> Homo sapiens

<400> 36
Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
1 5 10 15
Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Cys Lys Gln
20 25 30
Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

342-3PCT.ST25.txt

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
50 55 60

Ser Glu Arg Ser Lys Arg Asp Tyr Thr Pro Ser Thr Asn Ser Leu Ala
65 70 75 80

Leu Ser Arg Ser Ser Ile Ala Leu Pro Gln Gly Ser Met Ser Ser Ile
85 90 95

Lys Cys Leu Gln Thr Thr Glu Glu Pro Pro Ser Arg Thr Ala Gly Ala
100 105 110

Met Met Gln Phe Thr Ala Pro Ile Pro Gly Ala Thr Gly Pro Ile Lys
115 120 125

Leu Ser Gln Lys Thr Ile Val Gln Thr Pro Gly Pro Ile Val Gln Tyr
130 135 140

Pro Gly Ser Asn Ala Gly Pro Pro Ser Ala Pro Arg Gly Pro Pro Met
145 150 155 160

Ala Pro Ile Ile Ile Ser Gln Arg Thr Ala Ser Gln Leu Ala Ala Pro
165 170 175

Ile Ile Ile Ser Gln Arg Thr Ala Arg Ile Pro Gln Val His Thr Met
180 185 190

Asp Ser Ser Gly Lys Ile Thr Leu Thr Pro Val Val Ile Leu Thr Gly
195 200 205

Tyr Met Asp Glu Glu Leu Ala Lys Lys Ser Cys Ser Lys Ile Gln Ile
210 215 220

Leu Lys Cys Gly Gly Thr Ala Arg Ser Gln Asn Ser Arg Glu Glu Asn
225 230 235 240

Lys Glu Ala Leu Lys Asn Asp Ile Ile Phe Thr Asn Ser Val Glu Ser
245 250 255

Leu Lys Ser Ala His Ile Lys Glu Pro Glu Arg Glu Gly Lys Gly Thr
260 265 270

Asp Leu Glu Lys Asp Lys Ile Gly Met Glu Val Lys Val Asp Ser Asp
275 280 285

Ala Gly Ile Pro Lys Arg Gln Glu Thr Gln Leu Lys Ile Ser Glu Met
290 295 300

Ser Ile Pro Gln Gly Gln Gly Ala Gln Ile Lys Lys Ser Val Ser Asp
305 310 315 320

342-3PCT.ST25.txt

Val Pro Arg Gly Gln Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val
325 330 335

Pro Lys Gly Gln Glu Ala Gln Val Thr Lys Ser Gly Leu Val Val Leu
340 345 350

Lys Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Met Gly Val Pro Arg
355 360 365

Arg Gln Glu Ser Gln Val Lys Lys Ser Gln Ser Gly Val Ser Lys Gly
370 375 380

Gln Glu Ala Gln Val Lys Lys Arg Glu Ser Val Val Leu Lys Gly Gln
385 390 395 400

Glu Ala Gln Val Glu Lys Ser Glu Leu Lys Val Pro Lys Gly Gln Glu
405 410 415

Gly Gln Val Glu Lys Thr Glu Ala Asp Val Pro Lys Glu Gln Glu Val
420 425 430

Gln Glu Lys Lys Ser Glu Ala Gly Val Leu Lys Gly Pro Glu Ser Gln
435 440 445

Val Lys Asn Thr Glu Val Ser Val Pro Glu Thr Leu Glu Ser Gln Val
450 455 460

Lys Lys Ser Glu Ser Gly Val Leu Lys Gly Gln Glu Ala Gln Glu Lys
465 470 475 480

Lys Glu Ser Phe Glu Asp Lys Gly Asn Asn Asp Lys Glu Lys Glu Arg
485 490 495

Asp Ala Glu Lys Asp Pro Asn Lys Lys Glu Lys Gly Asp Lys Asn Thr
500 505 510

Lys Gly Asp Lys Gly Lys Asp Lys Val Lys Gly Lys Arg Glu Ser Glu
515 520 525

Ile Asn Gly Glu Lys Ser Lys Gly Ser Lys Arg Ala Lys Ala Asn Thr
530 535 540

Gly Arg Lys Tyr Asn Lys Lys Val Glu Glu
545 550

<210> 37

<211> 1182

<212> DNA

342-3PCT.ST25.txt

<213> Homo sapiens

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<400> 37
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atgtcatcca agccaacaag ccatgctgaa gtaaatgaaa ccatacccaa cccttaccga      120
ccaggcagct ttatggctcc tggatttcaa cagcctctgg gttcaatcaa cttagaaaac      180
caagctcagg gtgctcagcg tgcctagccc tacggcatca catctccggg aatctttgct      240
agcagtcaac cgggtcaagg aaatatacaa atgataaatc caagtgtggg aacagcagta      300
atgaacttta aagaagaagc aaaggcacta ggggtgatcc agatcatggt tggattgatg      360
cacattgggt ttggaattgt tttgtgttta atatccttct cttttagaga agtattaggt      420
tttgctctta ctgctgttat tgggtggata ccattctggg gtggcctttc ttttattatc      480
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ctgggaatga acattgttag ttctatcttg gccttcattg gagtgattct gctgctggtg      600
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atctcagcca cgctgatgat ctctccctc ttggagttct tcgtagcttg tgccacagcc      720
cattttgcca accaagcaaa caccacaacc aatatgtctg tcctgggttat tccaaatatg      780
tatgaaagca accctgtgac accagcgtct tcttcagctc ctcccagatg caacaactac      840
tcagctaata ccctaaata gtaaaagaaa aaggggtatc agtctaactt catggagaaa      900
aactacttgc aaaaacttct taagaagatg tcttttattg tctacaatga tttctagtct      960
ttaaaaactg tgtttgagat ttgtttttag gttggtcgct aatgatggct gtatctccct     1020
tcactgtctc ttcctacatt accactacta catgctggca aaggtgaagg atcagaggac     1080
tgaaaaatga ttctgcaact ctcttaaagt tagaaatgtt tctgttcata ttactttttc     1140
cttaataaaa tgtcattaga aacaaaaaaa aaaaaaaaaa aa                        1182

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<210> 38

<211> 267

<212> PRT

<213> Homo sapiens

<400> 38

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Pro Asn Pro Tyr Pro Pro Gly Ser Phe Met Ala Pro Gly Phe Gln Gln
20 25 30

Pro Leu Gly Ser Ile Asn Leu Glu Asn Gln Ala Gln Gly Ala Gln Arg
35 40 45

342-3PCT.ST25.txt

Ala Gln Pro Tyr Gly Ile Thr Ser Pro Gly Ile Phe Ala Ser Ser Gln
50 55 60

Pro Gly Gln Gly Asn Ile Gln Met Ile Asn Pro Ser Val Gly Thr Ala
65 70 75 80

Val Met Asn Phe Lys Glu Glu Ala Lys Ala Leu Gly Val Ile Gln Ile
85 90 95

Met Val Gly Leu Met His Ile Gly Phe Gly Ile Val Leu Cys Leu Ile
100 105 110

Ser Phe Ser Phe Arg Glu Val Leu Gly Phe Ala Ser Thr Ala Val Ile
115 120 125

Gly Gly Tyr Pro Phe Trp Gly Gly Leu Ser Phe Ile Ile Ser Gly Ser
130 135 140

Leu Ser Val Ser Ala Ser Lys Glu Leu Ser Arg Cys Leu Val Lys Gly
145 150 155 160

Ser Leu Gly Met Asn Ile Val Ser Ser Ile Leu Ala Phe Ile Gly Val
165 170 175

Ile Leu Leu Leu Val Asp Met Cys Ile Asn Gly Val Ala Gly Gln Asp
180 185 190

Tyr Trp Ala Val Leu Ser Gly Lys Gly Ile Ser Ala Thr Leu Met Ile
195 200 205

Phe Ser Leu Leu Glu Phe Phe Val Ala Cys Ala Thr Ala His Phe Ala
210 215 220

Asn Gln Ala Asn Thr Thr Thr Asn Met Ser Val Leu Val Ile Pro Asn
225 230 235 240

Met Tyr Glu Ser Asn Pro Val Thr Pro Ala Ser Ser Ser Ala Pro Pro
245 250 255

Arg Cys Asn Asn Tyr Ser Ala Asn Ala Pro Lys
260 265

<210> 39

<211> 1948

<212> DNA

<213> Homo sapiens

342-3PCT.ST25.txt

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<400> 39
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tcatttggga ggggctttgt attttcaaca ggagagttca aagttcattt ttttttcagc 120
aactacagtt ctaagtgaat tctattttta ttgatacatg gtattttaca tgtttatggg 180
atacatatga gtcataatct attttaataa ataccttagt gttgtaaaat caacagtgtt 240
ttttaaaaga aatatacctt gtttaattatc ccacatgtgt ctccagaagt acagcttgaa 300
caaatccacc ttctgtggac caagcaccac cctgggcatt tctagcatga gcaaaatcca 360
aggctctggc tggactccag agatgctatt tacctcagaa gcatgacaat aggaggcaga 420
aggagcaggg aaatccaagt cttttcttgt agtttccttg tttggggagg aaaagttgag 480
ttttactatt atggaaaaga aacaggaaat agagacagac aaagagatat gacaatacag 540
tcctgccacc cagatactca tttccaccta ccattccatg catttgtttt gaatatataa 600
gtatgtacat aaaggtaggt actctcaagt ccacagggc ttggctgtcc actgtttttg 660
aagttccaga atgtttttgc taagttgagg aaataccaaa tcaggactat gaaaattatg 720
gtatatattg atgtgtcaca gaacacagat gtgacataat aaagatgtgt aagattatat 780
atataacttg tgtgtacacc tacctcatct ggggataaca cctcaagttt aattttgagg 840
cttgggtcaa tcgtgcttcc cttcccttcc ataggtcctc tatgagatat tgtcatagat 900
tccatgttat gcaatagcca tagaatatga catctctcta tgataattct atattacttt 960
aattgctgca cagaagttca ttgtatgtaa gtgccacagt atattataga tcttcttggt 1020
ggacatctat ttctagttta tgtgatagta tagcactttc atgaatgttc ttgtacttga 1080
tctttacaca ttttcttttt tccttaggat gaattctgag agatgtaatt gatggggcaa 1140
aatgtactca ctgtttgagg ttgaaattt ttccatcaa agctgggtact cttgggtttt 1200
taagacaaag agcaaatcct cccctgccag gattgacttt tggctctttt ttttcaaacc 1260
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tgctcagaat tagagtgagg ggggtggggg gctgcagggg cagatgctgg ggaaagacac 1440
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ggatggaaac cagagtgggc tgatgattgg atgccaggcc tgagccagca actgtgatcc 1560
tgagctgtgc acacttctgg ttgggattat ttctggtttc tacttctgt ttgaagatgt 1620
ggcatggaga gtgctctgct ttgacctgaa gtattttatc tatectcagt ctccaggacac 1680
tgttgatgga attaaggcca agcacatctg caaaaagac attgctggag gaggtgcaaa 1740
gagctggaaa ccaagtctcc agtctggga aaagcagtgg tatggaaaag caatggaaaag 1800
agcattttga aaatgccatt cactgtttt ctggccttta tgatttctgc tgagaaatcc 1860
actgttagtc tgatggggtc tccttcatag caccaatgac ctgaagagcc ttgttgaagg 1920
aagactccat ctgatgactc agagcaag 1948

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342-3PCT.ST25.txt

<210> 40
<211> 1406
<212> DNA
<213> Homo sapiens

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<400> 40
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gaaggctctgt gctctggagc cagggtaaat gggtataaaa ttatacacca tggccctcct 120
aaagacactc taggaaaacc atgtcatcct gatcttaaaa cacctgcaag aaagagcaca 180
gtacttcacc attaataaag tagatatttc atcctgctca gaaaaccaac atttcagca 240
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gtaaataaac acaatgaact aaggaaagca gtctctccac ctgccagtaa catgctaaag 420
atggaatgga gcagagaggt aacaacgaat gcccaaagg gggcaaaca gtgcacttta 480
caacatagt atccagagga ccgcaaaacc agtacaagat gtggtgagaa tctctatatg 540
tcaagtgacc ctacttcctg gtcttctgca atccaaagct ggtatgacga gatcctagat 600
tttgtctatg gtgtaggacc aaagagtccc aatgcagttg ttggacatta tactcagctt 660
gtttgttact cgacttacca ggtaggctgt ggaattgcct actgtcccaa tcaagatagt 720
ctaaaatact actatgtttg ccaatattgt cctgctggtg ataatatgaa tagaaagaat 780
accccgtagc aacaaggac accttggtgc ggttgccctg atgactgtga caaaggacta 840
tgcaccaata gttgccagta tcaagatctc ctaagtaact gtgattcctt gaagaatata 900
gctggctgtg aacatgagtt actcaaggaa agtgcaagg ctacttgctt atgtgagaac 960
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actgaatcag gttgaggatt ttgaaaactg tataaccata ggatttaggt cactaggact 1260
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<210> 41
<211> 243
<212> PRT
<213> Homo sapiens

342-3PCT.ST25.txt

<400> 41

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1 5 10 15

Leu Pro Ala Glu Gly Lys Asp Pro Ala Phe Thr Ala Leu Leu Thr Thr
20 25 30

Gln Leu Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu Leu Arg
35 40 45

Lys Ala Val Ser Pro Pro Ala Ser Asn Met Leu Lys Met Glu Trp Ser
50 55 60

Arg Glu Val Thr Thr Asn Ala Gln Arg Trp Ala Asn Lys Cys Thr Leu
65 70 75 80

Gln His Ser Asp Pro Glu Asp Arg Lys Thr Ser Thr Arg Cys Gly Glu
85 90 95

Asn Leu Tyr Met Ser Ser Asp Pro Thr Ser Trp Ser Ser Ala Ile Gln
100 105 110

Ser Trp Tyr Asp Glu Ile Leu Asp Phe Val Tyr Gly Val Gly Pro Lys
115 120 125

Ser Pro Asn Ala Val Val Gly His Tyr Thr Gln Leu Val Trp Tyr Ser
130 135 140

Thr Tyr Gln Val Gly Cys Gly Ile Ala Tyr Cys Pro Asn Gln Asp Ser
145 150 155 160

Leu Lys Tyr Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn Asn Met
165 170 175

Asn Arg Lys Asn Thr Pro Tyr Gln Gln Gly Thr Pro Cys Ala Gly Cys
180 185 190

Pro Asp Asp Cys Asp Lys Gly Leu Cys Thr Asn Ser Cys Gln Tyr Gln
195 200 205

Asp Leu Leu Ser Asn Cys Asp Ser Leu Lys Asn Thr Ala Gly Cys Glu
210 215 220

His Glu Leu Leu Lys Glu Lys Cys Lys Ala Thr Cys Leu Cys Glu Asn
225 230 235 240

Lys Ile Tyr

342-3PCT.ST25.txt

<210> 42

<211> 21

<212> DNA

<213> Artificial sequence

<400> 42

tctagcactg tctcgatcaa g

21

<210> 43

<211> 21

<212> DNA

<213> Artificial sequence

<400> 43

tgtcctcttg gtacatctga c

21

<210> 44

<211> 21

<212> DNA

<213> Artificial sequence

<400> 44

ctgtgtcagc atccaaggag c

21

<210> 45

<211> 21

<212> DNA

<213> Artificial sequence

<400> 45

ttcaccttg ccagcatgta g

21

<210> 46

<211> 21

<212> DNA

<213> Artificial sequence

<400> 46

cttgctctga gtcacatgat g

21

342-3PCT.ST25.txt

<210> 47
<211> 21
<212> DNA
<213> Artificial sequence

<400> 47
cacagaatat gagccataca g

21

<210> 48
<211> 22
<212> DNA
<213> Artificial sequence

<400> 48
gggtgcactt ctgtgccttc ct

22

<210> 49
<211> 21
<212> DNA
<213> Artificial sequence

<400> 49
cggcaccagt tccaacaata g

21

<210> 50
<211> 18
<212> DNA
<213> Artificial sequence

<400> 50
caaaggttct ccaaattgt

18

<210> 51
<211> 21
<212> DNA
<213> Artificial sequence

342-3PCT.ST25.txt

<400> 51 tagcgccctca actgtcgttg g 21

<210> 52

<211> 23

<212> DNA

<213> Artificial sequence

<400> 52 cgtgagcgct tcgagatggt ccg 23

<210> 53

<211> 23

<212> DNA

<213> Artificial sequence

<400> 53 cctaaccagc tgcccaactg tag 23

<210> 54

<211> 1550

<212> DNA

<213> Homo sapiens

<400> 54
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gacagtccac agacaagtga attttaaagga gcaaccgagg aggcacctgc gaaagaaagc 120
ccacacacaa gtgaatttaa aggagcagcc cgggtgtcac ctatcagtga aagtgtgtta 180
gcacgacttt ccaagtttga agttgaagat gctgaaaatg ttgcttcata tgacagcaag 240
attaagaaaa ttgtgcattc aattgtatca tcctttgcat ttggactatt tggagttttc 300
ctggctttac tggatgtcac tctcatcctt gccgacctaa ttttactga cagcaaaactt 360
tatattcctt tggagtatcg ttctatttct ctatctattg ccttattttt tctcatggat 420
gttcttcttc gagtatttgt agaaaggaga cagcagtatt tttctgactt atttaacatt 480
ttagatactg ccattattgt gattcttctg ctggttgatg tcgtttacat tttttttgac 540
attaagttgc ttaggaatat tcccagatgg acacatttac ttcgacttct acgacttatt 600
attctgttaa gaatttttca tctgtttcat caaaaaagac aacttgaaaa gctgataaga 660
aggcgggttt cagaaaacaa aaggcgatac acaagggatg gatttgacct agacctcact 720
tacgttacag aacgtattat tgctatgtca tttccatctt ctggaaggca gtctttctat 780

342-3PCT.ST25.txt

agaaatccaa tcaaggaagt tgtgcggttt ctagataaga aacaccgaaa ccactatcga	840
gtctacaatc tatgcagtga aagagcttac gatcctaagc acttccataa tagggtcggt	900
agaatcatga ttgatgatca taatgtcccc actctacatc agatgggtgg tttcaccaag	960
gaagtaaatg agtggatggc tcaagatctt gaaaacatcg tagcgattca ctgtaaagga	1020
ggcacagata gaacaggaac tatggtttgt gccttcctta ttgcctctga aatatgttca	1080
actgcaaagg aaagcctgta ttattttgga gaaaggcgaa cagataaaac ccacagcgaa	1140
aaatttcagg gagtagaaac tccttctcag gttatgtacg tgatctaaaa atccaaatag	1200
aaatggagaa aaaggttgtc ttttccacta tticattagg aaaatgttcg gtacttgata	1260
acattacaac agacaaaata ttaattgatg tattcgacgg tccacctctg tatgatgatg	1320
tgaaagtgca gtttttctat tcgaatcttc ctacatacta tgacaattgc tcattttact	1380
tctggttgca cacatctttt attgaaaata acaggcttta tctacaaaaa aatgaattgg	1440
ataatctaca taaacaaaaa gcacggagaa tttatccatc agattttgcc gtggagatac	1500
tttttggcga gaaaatgact tccagtgatg ttgtagctgg atccgattaa	1550

<210> 55
 <211> 1407
 <212> DNA
 <213> Homo sapiens

<400> 55	
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gacagtccac agacaagtga atttaaagga gcaaccgagg aggcacctgc gaaagaaagc	120
ccacacacaa gtgaatttaa aggagcagcc cgggtgtcac ctatcagtga aagtgtgtta	180
gcacgacttt ccaagtttga agttgaagat gctgaaaatg ttgcttcata tgacagcaag	240
attaagaaaa ttgtgcattc aattgtatca tcctttgcat ttggactatt tggagttttc	300
ctggtcttac tggatgtcac tctcatcctt gccgacctaa ttttactga cagcaaactt	360
tatattcctt tggagtatcg ttctatttct ctagctattg ccttattttt tctcatggat	420
gttcttcttc gagtatttgt agaaaggaga cagcagtatt tttctgactt atttaacatt	480
ttagatactg ccattattgt gattcttctg ctggttgatg tcgtttacat ttttttgac	540
attaagttgc ttaggaatat tcccagatgg acacatttac ttcgacttct acgacttatt	600
attctgttaa gaatttttca tctgtttcat caaaaaagac aacttgaaaa gctgataaga	660
aggcggggtt cagaaaaaca aaggcgatac acaagggatg gatttgacct agacctcact	720
tacgttacag aacgtattat tgctatgtca tttccatctt ctggaaggca gtctttctat	780
agaaatccaa tcaaggaagt tgtgcggttt ctagataaga aacaccgaaa ccactatcga	840
gtctacaatc tatgcagtga aagagcttac gatcctaagc acttccataa tagggtcggt	900

342-3PCT.ST25.txt

agaatcatga ttgatgatca taatgtcccc actctacatc agatggtggt tttcaccaag	960
gaagtaaattg agtggatggc tcaagatctt gaaaacatcg tagcgattca ctgtaaagga	1020
ggcacagggtt atgtacgtga tctaaaaatc caaatagaaa tggagaaaaa ggttgtcttt	1080
tccactatatt cattaggaaa atgttcggtt cttgataaca ttacaacaga caaaatatta	1140
attgatgtat tcgacggtcc acctctgtat gatgatgtga aagtgcagtt tttctattcg	1200
aatcttccta catactatga caattgctca ttttacttct gggtgcacac atcttttatt	1260
gaaaataaca ggctttatct accaaaaaat gaattggata atctacataa acaaaaagca	1320
cggagaattt atccatcaga ttttgccgtg gagatacttt ttggcgagaa aatgacttcc	1380
agtgatgttg tagctggatc cgattaa	1407

<210> 56

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 56

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gacagtccac agacaagtga atttaaagga gcaaccgagg aggacactgc gaaagaaagt	120
gtgttagcac gactttccaa gtttgaagtt gaagatgctg aaaatgttgc ttcatatgac	180
agcaagatta agaaaattgt gcattcaatt gtatcatcct ttgcatttgg actatttggg	240
gttttcttgg tcttactgga tgtcactctc atccttgccg acctaatttt cactgacagc	300
aaactttata ttcctttgga gtatcgttct atttctctag ctattgcctt attttttctc	360
atggatgttc ttcttcgagt attttagtaa aggagacagc agtatcttct tgacttattt	420
aacatttttag atactgccat tattgtgatt ctctgctggt ttgatgtcgt ttacattttt	480
tttgacatta agttgcttag gaattattccc agatggacac atttacttctg acttctacga	540
cttattattc tgttaagaat ttttcatctg tttcatcaaa aaagacaact tgaaaagctg	600
ataagaaggc gggtttcaga aaacaaaagg cgatacaciaa gggatggatt tgacctagac	660
ctcacttacg ttacagaacg tattattgct atgtcatttc catcttctgg aaggcagttc	720
ttctatagaa atccaatcaa ggaagttgtg cggtttctag ataagaaaca ccgaaaccac	780
tatcgagtct acaatctatg cagtgaagaa gcttacgac ctaagcactt ccataatagg	840
gtcgttagaa tcatgattga tgatcataat gtccccactc tacatcagat ggtgggtttc	900
accaaggaag taaatgagtg gatggctcaa gatcttgaag acatcgtagc gattcactgt	960
aaaggaggca cagatagaac aggaactatg gtttgtgcct tccttattgc ctctgaaata	1020
tgttcaactg caaaggaaag cctgtattat tttggagaaa ggcgaaacaga taaaaccac	1080
agcgaaaaat ttcaggaggt agaaactcct tctgtacttg ataacattac aacagacaaa	1140

342-3PCT.ST25.txt

atattaattg atgtattcga cgggccacct ctgtatgatg atgtgaaagt gcagtttttc 1200
tattcgaatc ttcttacata ctatgacaat tgctcatttt acttctgggt gcacacatct 1260
tttattgaaa ataacaggct ttatctacca aaaaatgaat tggataatct acataaaca 1320
aaagcacgga gaatttatcc atcagatttt gccgtggaga tacttttttg cgagaaaatg 1380
acttccagtg atgttgtagc tggatccgat taa 1413

<210> 57

<211> 1353

<212> DNA

<213> Homo sapiens

<400> 57
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gacagtccac agacaagtga atttaaagga gcaaccgagg aggcacctgc gaaagaaagt 120
gtgttagcac gactttccaa gtttgaagt gaagatgctg aaaatgttgc ttcatatgac 180
agcaagatta agaaaattgt gcattcaatt gtatcatcct ttgcatttgg actatttggga 240
gttttctctg tcttactgga tgtcactctc atccttgccg acctaatttt cactgacagc 300
aaactttata ttcttttga gtatcgttct atttctctag ctattgcctt attttttctc 360
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aacatttttag atactgccat tattgtgatt cttctgctgg ttgatgtcgt ttacattttt 480
tttgacatta agttgcttag gaatattccc agatggacac atttacttcg acttctacga 540
cttattattc tgtaagaat tttcatctg tttcatcaaa aaagacaact tgaaaagctg 600
ataagaaggc gggtttcaga aaacaaaagg cgatacacia gggatggatt tgacctagac 660
ctcacttacg ttacagaacg tattattgct atgtcatttc catcttctgg aaggcagctt 720
ttctatagaa atccaatcaa ggaagtttg cggtttctag ataagaaaca ccgaaaccac 780
tatcgagtct acaatctatg cagtgaaga gcttacgac ctaagcactt ccataatagg 840
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accaaggaag taaatgagt gatggctcaa gatctgaaa acatcgtagc gattcactgt 960
aaaggaggca caggttatgt acgtgatcta aaaatccaaa tagaatgga gaaaaagggt 1020
gtcttttcca ctatttcatt aggaaaatgt tcggtacttg ataacattac aacagacaaa 1080
atattaattg atgtattcga cgggccacct ctgtatgatg atgtgaaagt gcagtttttc 1140
tattcgaatc ttcttacata ctatgacaat tgctcatttt acttctgggt gcacacatct 1200
tttattgaaa ataacaggct ttatctacca aaaaatgaat tggataatct acataaaca 1260
aaagcacgga gaatttatcc atcagatttt gccgtggaga tacttttttg cgagaaaatg 1320
acttccagtg atgttgtagc tggatccgat taa 1353

342-3PCT.ST25.txt

<210> 58
 <211> 395
 <212> PRT
 <213> Homo sapiens

<400> 58

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Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1      5      10      15
Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20      25      30
Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
35      40      45
Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
50      55      60
Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
65      70      75      80
Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
85      90      95
Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
100     105     110
Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
115     120     125
Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
130     135     140
Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
145     150     155     160
Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr
165     170     175
Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
180     185     190
Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
195     200     205
Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
210     215     220
    
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342-3PCT.ST25.txt

Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
225 230 235 240

Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
245 250 255

Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
260 265 270

Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg
275 280 285

Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile
290 295 300

Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys
305 310 315 320

Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile
325 330 335

His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe
340 345 350

Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr
355 360 365

Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly
370 375 380

Val Glu Thr Pro Ser Gln Val Met Tyr Val Ile
385 390 395

<210> 59

<211> 468

<212> PRT

<213> Homo sapiens

<400> 59

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
35 40 45

342-3PCT.ST25.txt

Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
50 55 60

Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
65 70 75 80

Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
85 90 95

Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
100 105 110

Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
115 120 125

Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
130 135 140

Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
145 150 155 160

Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr
165 170 175

Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
180 185 190

Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
195 200 205

Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
210 215 220

Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
225 230 235 240

Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
245 250 255

Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
260 265 270

Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg
275 280 285

Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile
290 295 300

Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys
305 310 315 320

342-3PCT.ST25.txt

Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile
325 330 335

His Cys Lys Gly Gly Thr Gly Tyr Val Arg Asp Leu Lys Ile Gln Ile
340 345 350

Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu Gly Lys Cys
355 360 365

Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp Val Phe
370 375 380

Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe Tyr Ser
385 390 395 400

Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp Leu His
405 410 415

Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn Glu Leu
420 425 430

Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser Asp Phe
435 440 445

Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp Val Val
450 455 460

Ala Gly Ser Asp
465

<210> 60
<211> 470
<212> PRT
<213> Homo sapiens

<400> 60
Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15
Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30
Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45
Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60

342-3PCT.ST25.txt

Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
115 120 125

Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
130 135 140

Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
145 150 155 160

Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
165 170 175

Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
180 185 190

Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
195 200 205

Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
210 215 220

Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
225 230 235 240

Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
245 250 255

His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
260 265 270

Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
275 280 285

His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
290 295 300

Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
305 310 315 320

Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe Leu Ile
325 330 335

342-3PCT.ST25.txt

Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr Phe Gly
340 345 350
Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly Val Glu
355 360 365
Thr Pro Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp
370 375 380
Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe
385 390 395 400
Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp
405 410 415
Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn
420 425 430
Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser
435 440 445
Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp
450 455 460
Val Val Ala Gly Ser Asp
465 470

<210> 61

<211> 450

<212> PRT

<213> Homo sapiens

<400> 61

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15
Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30
Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45
Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60
Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

342-3PCT.ST25.txt

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
115 120 125

Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
130 135 140

Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
145 150 155 160

Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
165 170 175

Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
180 185 190

Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
195 200 205

Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
210 215 220

Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
225 230 235 240

Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
245 250 255

His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
260 265 270

Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
275 280 285

His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
290 295 300

Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
305 310 315 320

Lys Gly Gly Thr Gly Tyr Val Arg Asp Leu Lys Ile Gln Ile Glu Met
325 330 335

Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu Gly Lys Cys Ser Val
340 345 350

342-3PCT.ST25.txt

Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp Val Phe Asp Gly
355 360 365

Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe Tyr Ser Asn Leu
370 375 380

Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp Leu His Thr Ser
385 390 395 400

Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn Glu Leu Asp Asn
405 410 415

Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser Asp Phe Ala Val
420 425 430

Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp Val Val Ala Gly
435 440 445

Ser Asp
450

<210> 62

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 62
cgcccttaga catggctcag atgtgcagcc acagtgcagct tctgaacatt tcttctcaga 60
ctaagctctt acacacagtt gcagttgaaa gaaagaattg cttgacatgg ccacaggagc 120
aggcagcttc ctgcagacat gacagtcaac gcaaactcat gtcactgtgg gcagacacat 180
gtttgcaaag agactcagag ccaacaagc aactcaatg tgctttgccc aaatttacct 240
attaggtaaa tcttcctcc tccaagaag aaagtggaga gagcatgagt cctcacatgg 300
gaacttgaag tcagggaaat gaaggctcac caattatttg tgcattgggt taagtcttcc 360
ttgaaattaa gttcaggttt gtctttgtgt gtaccaaita atgacaagag gttagataga 420
agtatgctag atggcaaaga gaaatatggt ttgtgtcttc aattttgcta aaaataacct 480
agaacatgga taattcattt attaatgat ttgtgtaagc caagtcctat ttggagaaaa 540
ttaatagttt ttctaaaaaa gaattttctc aatatcacct ggcttgataa catttttctc 600
cttcgagttc ctttttctgg agtttaacaa acttggtctt tacaaataga ttatattgac 660
tacctctcac tgatgttatg atattagttt ctattgctta ctttgtattt ctaattttag 720
gattcacaat ttagctggag aactattttt taacctgttg cacctaaaca tgattgagct 780
agaagacagt ttaccatat gcatgcattt tctctgagtt atattttaaa atctatacat 840

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<210> 63
<211> 405
<212> DNA
<213> Homo sapiens.
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<210>	64
<211>	106
<212>	PRT
<213>	Homo sapiens

<400> 64

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Cys Gly Pro Pro Pro Gly His Gly Pro Gly Pro Cys
20 25 30

Gly Pro Pro Pro Thr Met Val Gln Gly Pro Ala Gly His Pro Leu Ala
35 40 45

342-3PCT.ST25.txt
 Met Ala Gln Gly Pro Ala Gly His Pro Pro Thr Met Val Gln Gly Pro
 50 55 60
 Ala Gly Leu Pro Leu Ala Met Ala Gln Val Thr His Pro Leu Val His
 65 70 75 80
 Ile Thr Glu Glu Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu
 85 90 95
 Arg Ile Ala Gln Leu Thr Trp Asn Glu Ala
 100 105

<210> 65
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 65
 Met Ala Ile Leu Gln Val Thr Ala Gly His Pro Leu Ala Met Ala Gln
 1 5 10 15
 Gly Pro Ala Gly His Pro Pro Pro Trp Ser Arg Ala Leu Arg Ala Thr
 20 25 30
 Pro Trp Pro Trp Pro Arg Ala Leu Arg Ala Thr Pro Pro Pro Trp Ser
 35 40 45
 Arg Ala Leu Arg Ala Ser Pro Trp Pro Trp Pro Arg Ser Pro Thr Pro
 50 55 60
 Trp Ser Thr Ser Leu Arg Lys
 65 70

<210> 66
 <211> 21
 <212> DNA
 <213> Artificial sequence

<400> 66
 agacatggct cagatgtgca g

21

<210> 67
 <211> 21
 <212> DNA

342-3PCT.ST25.txt

<213> Artificial sequence

<400> 67
ggaaattagc aaggctctcg c

21

<210> 68

<211> 21

<212> DNA

<213> Artificial sequence

<400> 68
tcaggatttc cctgctctta c

21

<210> 69

<211> 21

<212> DNA

<213> Artificial sequence

<400> 69
tgggcaattc tctcaggctt g

21

<210> 70

<211> 908

<212> DNA

<213> Homo sapiens

<400> 70
aaaattcggc acgaggccgg gctgtggtct agcataaagg cggagcccag aagaaggggc 60
ggggatggg agaagcctcc ccacctgccc ccgcaaggcg gcatctgctg gtcctgctgc 120
tgctctctc taccctggtg atccctccg ctgcagctcc tatccatgat gctgacgccc 180
aagagagctc cttgggtctc acaggcctcc agagcctact ccaaggcttc agccgacttt 240
tcctgaaagg taacctgctt cggggcatag acagcttatt ctctgcccc atggacttcc 300
ggggcctccc tgggaactac cacaagagg agaaccagga gcaccagctg gggaacaaca 360
ccctctccag ccacctccag atcgacaaga tgaccgacaa caagacagga gaggtgctga 420
tctccgagaa tgtggtggca tccattcaac cagcggaggg gagcttcgag ggtgatttga 480
aggtaccag gatggaggag aaggaggccc tggtagccat ccagaaggcc acggacagct 540
tccacacaga actccatccc cgggtggcct tctggatcat taagctgcca cggcggaggt 600
cccaccagga tgccctggag ggcggccact ggctcagcga gaagcgacac cgcctgcagg 660

342-3PCT.ST25.txt

ccatccggga tggactccgc aaggggaccc acaaggacgt cctagaagag gggaccgaga 720
gctcctccca ctccaggctg tccccccgaa agaccacatt actgtacatc ctcaggccct 780
ctcggcagct gtaggggtgg ggaccgggga gcacctgcct gtagcccccac tcagaccctg 840
ccccaagcac catatggaaa taaagtcttt tcttacatct aaaaaaaaaa aaaaaaaaaa 900
aaaaaaaaa 908

<210> 71
<211> 242
<212> PRT
<213> Homo sapiens

<400> 71

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 5 10 15
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
100 105 110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 135 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
145 150 155 160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
165 170 175

342-3PCT.ST25.txt
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
180 185 190

Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205

His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
210 215 220

Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240

Gln Leu

<210> 72

<211> 21

<212> DNA

<213> Artificial sequence

<400> 72

ctcctatcca tgatgctgac g

21

<210> 73

<211> 21

<212> DNA

<213> Artificial sequence

<400> 73

cctgaggatg tacagtaagt g

21

<210> 74

<211> 2987

<212> DNA

<213> Homo sapiens

<400> 74

tttcccagcg aggtggtcat tcagagccta cacatctgtt ctgtatttta acccatggat 60

gagaatattc attcaagcca agagagttaa aactaaacat ctttgctatt gcctctacag 120

accagaaaag tatctttatg tcacatcttc ttttaaagga gcatttaaag atgaagttaa 180

aaaggcagaa gaagcagtaa agattgctga atccatattg aaagaagcac aaatcaaagt 240

aaaccagtgt gacagaacct ctttatcttc tgccaaggat gtattacaga gagcttttga 300

342-3PCT.ST25.txt

agatgtagaa gcaaagcaaa agaattctaa agagaaacaa agagaattaa aaacagcaag 360
aacgctctcc ctgttctatg gagtgaacgt agaaaaccga agccaagctg gaatgttcat 420
ttacagtaat aaccgtttga tcaaaatgca tgaaaaagtg ggctcacagt tgaaactgaa 480
gtccttactt ggcgagcg tgggtggaat tgttaatata cccttggagg tcatggaacc 540
atcccataat aaacaggaat ttctcaatgt ccaagagtat aatcatctac taaaagtcac 600
gggacagtac ttggtccagt actgtaagga caccggcatc aataatagaa atttaacatt 660
gttttgcaat gaatttggat accagaatga catcgatgtg gagaaacctt taaattcttt 720
tcaatatcaa agaagacaag ccatgggtat ccattcatc atacaatgtg atctttgtct 780
taaattggaga gtcttgccct cctctactaa ttatcaggaa aaagaatttt ttgacatttg 840
gatttgtgct aataatccca accgcttga aaacagttgt catcaggtag aatgtctacc 900
ttccatccca ctgggcacca tgagcacaat atcaccatca aaaaatgaga aagagaagca 960
acttagagag tcggtcataa agtatcaaaa tagactggca gaacagcagc cacagcctca 1020
atttatacca gtggacgaaa tcaactgtac ttccacctgc ctaacttcag cacataagga 1080
aaataccaaa acccagaaaa tcaggctttt ggcgatgac ttgaagcatg aatctctttc 1140
atcctttgag ctttcagcga gccgtagagg acagaaaaga aacatagaag agacagactc 1200
tgatgtagag tatatttcag aaacaaaaat tatgaaaag tctatggagg agaaaatgaa 1260
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ccagagaagt cagattgcta atattaccac tgtctggaga gctcaaccaa ctgaagggtg 1380
cctgaagaat gcccaggccg cttcttggga aatgaaaagg aagcagagtc tgaactttgt 1440
agaggaatgt aaggtattga ctgaagatga gaacacgagt gattcagata taatcctggt 1500
ttcagataaa agcaaacctg atgtttcatt gaaacaagaa aaaaaggaaa ttctcttttt 1560
aaaccaagaa aaacaggagc tgtgcaatga tgttctagca atgaaaagaa gctcttcatt 1620
acctagctgg aaaagcttgc tcaatgtgcc gatggaagat gtgaatctaa gttctggaca 1680
catagccaga gtttctgtga gtggcagttg taaagtgtct tcttcgccag cgtcttctca 1740
aagcacacct gtcaaggaaa cagtgaagaa actgaagtct aagttaaggg agattcttct 1800
gtattttttt cctgagcatc agctaccatc agaattggaa gaacctgcat taagttgtga 1860
gctggagcag tgcccagagc agatgaacaa aaagctgaaa atgtgtttca accagatata 1920
gaatacttac atggtccaat atgaaaaaaa aataaaggagg aaattgcagt ccattatcta 1980
tgattcaaata acaagaggaa tacataatga aatctctctg gggaatgtg aaaataaaag 2040
aaaaatctct gaggataagc tgaagaatct tctataaaa ctggcactat tgttgagaa 2100
actccaactg ggtggtccag aaggtgacct ggagcagact gacacttatt tagaagcttt 2160
gcttaagaa gataatcttc tcttcagaa caatttaaat aaagtaacta tagatgcaag 2220
acatagactc ctttagaaa aaaatgaaa gacttcggaa aattaagtca gagatgggtat 2280
taccttttaa aaaatgctaa taagaaaatt ggaagattct ttaaaaaatt tttctttttt 2340

342-3PCT.ST25.txt

gttggttgta ctgtaaagtc tttctgttt aacaataaga aataagaaat aatttttttc 2400
 aaataagaaa attgtgtact ctagaaatgg agaccgattt acaatttatg tattccctaa 2460
 tccaattatc taaatcttcc ttttctttca gaaatattaa taatatctag agttctctaa 2520
 ttttcatgtg agctactgaa aaaaatgaaa atgtcactca agcttaactt ttgttattcc 2580
 ttaaaagatt gttattgtaa ttttggttatt ccttaaaaac atttaaaagc agattttttc 2640
 aaaatcgata tgtgaaggac tacagaatca cctcctcttg aagatattga aaaagaaaga 2700
 cattatgccc tttctccact atagccaaca ctacgtcaag cagaaaatac aaatcccccc 2760
 aaaactttga gacatagctt atataatttt attatttagt catagtaaaa gaataaatct 2820
 cctaagcata atatgtatac atattacaca tatgtaaaaa ttgttgtttt acatttacat 2880
 atacgtaaag aagtatgttt ttacactttt ctgtataagt gttttttttt tgtttagaaa 2940
 tgtctgaaac ttttagacaaa aacagtaaaa catttaatat tcatttg 2987

<210> 75

<211> 735

<212> PRT

<213> Homo sapiens

<400> 75

Met Arg Ile Phe Ile Gln Ala Lys Arg Val Lys Thr Lys His Leu Cys
 1 5 10 15
 Tyr Cys Leu Tyr Arg Pro Arg Lys Tyr Leu Tyr Val Thr Ser Ser Phe
 20 25 30
 Lys Gly Ala Phe Lys Asp Glu Val Lys Lys Ala Glu Glu Ala Val Lys
 35 40 45
 Ile Ala Glu Ser Ile Leu Lys Glu Ala Gln Ile Lys Val Asn Gln Cys
 50 55 60
 Asp Arg Thr Ser Leu Ser Ser Ala Lys Asp Val Leu Gln Arg Ala Leu
 65 70 75 80
 Glu Asp Val Glu Ala Lys Gln Lys Asn Leu Lys Glu Lys Gln Arg Glu
 85 90 95
 Leu Lys Thr Ala Arg Thr Leu Ser Leu Phe Tyr Gly Val Asn Val Glu
 100 105 110
 Asn Arg Ser Gln Ala Gly Met Phe Ile Tyr Ser Asn Asn Arg Leu Ile
 115 120 125

342-3PCT.ST25.txt
 Lys Met His Glu Lys Val Gly Ser Gln Leu Lys Leu Lys Ser Leu Leu
 130 135 140
 Gly Ala Gly Val Val Gly Ile Val Asn Ile Pro Leu Glu Val Met Glu
 145 150 155 160
 Pro Ser His Asn Lys Gln Glu Phe Leu Asn Val Gln Glu Tyr Asn His
 165 170 175
 Leu Leu Lys Val Met Gly Gln Tyr Leu Val Gln Tyr Cys Lys Asp Thr
 180 185 190
 Gly Ile Asn Asn Arg Asn Leu Thr Leu Phe Cys Asn Glu Phe Gly Tyr
 195 200 205
 Gln Asn Asp Ile Asp Val Glu Lys Pro Leu Asn Ser Phe Gln Tyr Gln
 210 215 220
 Arg Arg Gln Ala Met Gly Ile Pro Phe Ile Ile Gln Cys Asp Leu Cys
 225 230 235 240
 Leu Lys Trp Arg Val Leu Pro Ser Ser Thr Asn Tyr Gln Glu Lys Glu
 245 250 255
 Phe Phe Asp Ile Trp Ile Cys Ala Asn Asn Pro Asn Arg Leu Glu Asn
 260 265 270
 Ser Cys His Gln Val Glu Cys Leu Pro Ser Ile Pro Leu Gly Thr Met
 275 280 285
 Ser Thr Ile Ser Pro Ser Lys Asn Glu Lys Glu Lys Gln Leu Arg Glu
 290 295 300
 Ser Val Ile Lys Tyr Gln Asn Arg Leu Ala Glu Gln Gln Pro Gln Pro
 305 310 315 320
 Gln Phe Ile Pro Val Asp Glu Ile Thr Val Thr Ser Thr Cys Leu Thr
 325 330 335
 Ser Ala His Lys Glu Asn Thr Lys Thr Gln Lys Ile Arg Leu Leu Gly
 340 345 350
 Asp Asp Leu Lys His Glu Ser Leu Ser Ser Phe Glu Leu Ser Ala Ser
 355 360 365
 Arg Arg Gly Gln Lys Arg Asn Ile Glu Glu Thr Asp Ser Asp Val Glu
 370 375 380
 Tyr Ile Ser Glu Thr Lys Ile Met Lys Lys Ser Met Glu Glu Lys Met
 385 390 395 400

342-3PCT.ST25.txt

Asn Ser Gln Gln Gln Arg Ile Pro Val Ala Leu Pro Glu Asn Val Lys
405 410 415

Leu Ala Glu Arg Ser Gln Arg Ser Gln Ile Ala Asn Ile Thr Thr Val
420 425 430

Trp Arg Ala Gln Pro Thr Glu Gly Cys Leu Lys Asn Ala Gln Ala Ala
435 440 445

Ser Trp Glu Met Lys Arg Lys Gln Ser Leu Asn Phe Val Glu Glu Cys
450 455 460

Lys Val Leu Thr Glu Asp Glu Asn Thr Ser Asp Ser Asp Ile Ile Leu
465 470 475 480

Val Ser Asp Lys Ser Asn Thr Asp Val Ser Leu Lys Gln Glu Lys Lys
485 490 495

Glu Ile Pro Leu Leu Asn Gln Glu Lys Gln Glu Leu Cys Asn Asp Val
500 505 510

Leu Ala Met Lys Arg Ser Ser Ser Leu Pro Ser Trp Lys Ser Leu Leu
515 520 525

Asn Val Pro Met Glu Asp Val Asn Leu Ser Ser Gly His Ile Ala Arg
530 535 540

Val Ser Val Ser Gly Ser Cys Lys Val Ala Ser Ser Pro Ala Ser Ser
545 550 555 560

Gln Ser Thr Pro Val Lys Glu Thr Val Arg Lys Leu Lys Ser Lys Leu
565 570 575

Arg Glu Ile Leu Leu Tyr Phe Phe Pro Glu His Gln Leu Pro Ser Glu
580 585 590

Leu Glu Glu Pro Ala Leu Ser Cys Glu Leu Glu Gln Cys Pro Glu Gln
595 600 605

Met Asn Lys Lys Leu Lys Met Cys Phe Asn Gln Ile Gln Asn Thr Tyr
610 615 620

Met Val Gln Tyr Glu Lys Lys Ile Lys Arg Lys Leu Gln Ser Ile Ile
625 630 635 640

Tyr Asp Ser Asn Thr Arg Gly Ile His Asn Glu Ile Ser Leu Gly Gln
645 650 655

Cys Glu Asn Lys Arg Lys Ile Ser Glu Asp Lys Leu Lys Asn Leu Arg
660 665 670

Ile Lys Leu Ala Leu Leu Leu Gln Lys Leu Gln Leu Gly Gly Pro Glu
675 680 685

Gly Asp Leu Glu Gln Thr Asp Thr Tyr Leu Glu Ala Leu Leu Lys Glu
690 695 700

Asp Asn Leu Leu Phe Gln Asn Asn Leu Asn Lys Val Thr Ile Asp Ala
705 710 715 720

Arg His Arg Leu Pro Leu Glu Lys Asn Glu Lys Thr Ser Glu Asn
725 730 735

<210> 76
<211> 21
<212> DNA
<213> Artificial sequence

<400> 76
ctgagtatca gctaccatca g 21

<210> 77
<211> 21
<212> DNA
<213> Artificial sequence

<400> 77
tctgtagtcc ttcacatattc g 21

<210> 78
<211> 21
<212> DNA
<213> Artificial sequence

<400> 78
ttttgtctat ggtgtaggac c 21

<210> 79
<211> 21
<212> DNA
<213> Artificial sequence

342-3PCT.ST25.txt

<400> 79
ggaatggcaa tgatgttaca g

21

<210> 80
<211> 20
<212> PRT
<213> Homo sapiens

<400> 80
Met Ser Thr Val Lys Glu Gln Leu Ile Glu Lys Leu Ile Glu Asp Asp
1 5 10 15
Glu Asn Ser Gln
20

<210> 81
<211> 14
<212> PRT
<213> Homo sapiens

<400> 81
Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
1 5 10

<210> 82
<211> 13
<212> PRT
<213> Homo sapiens

<400> 82
Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr
1 5 10

<210> 83
<211> 15
<212> PRT
<213> Homo sapiens

<400> 83

342-3PCT.ST25.txt
 Gly Val Ala Gly Gln Asp Tyr Trp Ala Val Leu Ser Gly Lys Gly
 1 5 10 15

<210> 84
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 84
 Ser Arg Glu Val Thr Thr Asn Ala Gln Arg
 1 5 10

<210> 85
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 85
 tgctcttact ccaaaaagat ggaccaggg ccctgcgggc ctccccctgg ccatggccca 60
 ggtcaccac cccttgtcc acatcactga ggaagtagaa gaaaacagga cacaagatgg 120
 caagcctgag agaattgccc agctgacctg gaaggaggcc taaaccgcaa tattctcttc 180
 ctaataaaca gcctcctaga ggccacattc tattct 216

<210> 86
 <211> 227
 <212> DNA
 <213> Homo sapiens

<400> 86
 tgctcttact ccaaaaagat ggaccaggt ccgaaggggc actgccactg tggggggcat 60
 ggccatcctc caggtcacc accccctggt ccacatcact gaggaagtag aagaaaacag 120
 gacacaagat ggcaagcctg agagaattgc ccagctgacc tggaatgagg cctaaaccac 180
 aatcttctct tcctaataaa cagcctccta gaggccacat tctattc 227

<210> 87
 <211> 261
 <212> DNA
 <213> Homo sapiens

342-3PCT.ST25.txt

```
<400> 87
tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg tggggggcat    60
ggccatcctc caggtcactg cgggcctccc cctggccatg gccaggtca cccacccct    120
ggtccacatc actgaggaag tagaagaaaa caggacacaa gatggcaagc ctgagagaat    180
tgcccagctg acctggaatg aggcctaaac cacaatcttc tcttcctaat aaacagcctc    240
ctagaggcca cattctattc t-                                     261
```

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<210> 88
<211> 327
<212> DNA
<213> Homo sapiens
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```
<400> 88
tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg tggggggcat    60
ggccatcctc caggtcactg cgggccaccc cccaccatg gtccagggcc ctgcggggcca    120
ccccccacc atggtccagg gccctgcggg cctccccctg gccatggccc aggtcaccca    180
ccccctggtc cacatcactg aggaagtaga agaaaacagg acacaagatg gcaagcctga    240
gagaattgcc cagctgacct ggaatgaggc ctaaaccaca atcttctctt cctaataaac    300
agcctcctag aggccacatt ctattct                                     327
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```
<210> 89
<211> 31
<212> PRT
<213> Homo sapiens
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```
<400> 89
Leu Leu Leu Gln Lys Asp Gly Pro Arg Ala Leu Arg Ala Ser Pro Trp
 1          5          10          15
Pro Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu Arg Lys
          20          25          30
```

```
<210> 90
<211> 23
<212> PRT
<213> Homo sapiens
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342-3PCT.ST25.txt

<400> 90

Met Asp Pro Gly Pro Cys Gly Pro Pro Pro Gly His Gly Pro Gly His
1 5 10 15

Pro Pro Pro Gly Pro His His
20

<210> 91

<211> 36

<212> PRT

<213> Homo sapiens

<400> 91

Met Ala Gln Val Thr His Pro Leu Val His Ile Thr Glu Glu Val Glu
1 5 10 15

Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln Leu Thr
20 25 30

Trp Lys Glu Ala
35

<210> 92

<211> 34

<212> PRT

<213> Homo sapiens

<400> 92

Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu Trp
1 5 10 15

Gly Ala Trp Pro Ser Ser Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu
20 25 30

Arg Lys

<210> 93

<211> 27

<212> PRT

<213> Homo sapiens

342-3PCT.ST25.txt

<400> 93

Met Asp Pro Gly His Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Pro Pro Pro Gly Pro His His
20 25

<210> 94

<211> 38

<212> PRT

<213> Homo sapiens

<400> 94

Met Ala Ile Leu Gln Val Thr His Pro Leu Val His Ile Thr Glu Glu
1 5 10 15

Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln
20 25 30

Leu Thr Trp Asn Glu Ala
35

<210> 95

<211> 46

<212> PRT

<213> Homo sapiens

<400> 95

Leu Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu
1 5 10 15

Trp Gly Ala Trp Pro Ser Ser Arg Ser Leu Arg Ala Ser Pro Trp Pro
20 25 30

Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu Arg Lys
35 40 45

<210> 96

<211> 38

<212> PRT

<213> Homo sapiens

342-3PCT.ST25.txt

<400> 96

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
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Pro Pro Gly His Cys Gly Pro Pro Pro Gly His Gly Pro Gly His Pro
20 25 30

Pro Pro Gly Pro His His
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<210> 97

<211> 49

<212> PRT

<213> Homo sapiens

<400> 97

Met Ala Ile Leu Gln Val Thr Ala Gly Leu Pro Leu Ala Met Ala Gln
1 5 10 15

Val Thr His Pro Leu Val His Ile Thr Glu Glu Val Glu Glu Asn Arg
20 25 30

Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln Leu Thr Trp Asn Glu
35 40 45

Ala

<210> 98

<211> 68

<212> PRT

<213> Homo sapiens

<400> 98

Leu Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu
1 5 10 15

Trp Gly Ala Trp Pro Ser Ser Arg Ser Leu Arg Ala Thr Pro Pro Pro
20 25 30

Trp Ser Arg Ala Leu Arg Ala Thr Pro Pro Pro Trp Ser Arg Ala Leu
35 40 45

Arg Ala Ser Pro Trp Pro Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr
50 55 60

342-3PCT.ST25.txt

Ser Leu Arg Lys
65

<210> 99

<211> 60

<212> PRT

<213> Homo sapiens

<400> 99

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Cys Gly Pro Pro Pro His His Gly Pro Gly Pro Cys
20 25 30

Gly Pro Pro Pro His His Gly Pro Gly Pro Cys Gly Pro Pro Pro Gly
35 40 45

His Gly Pro Gly His Pro Pro Pro Gly Pro His His
50 55 60

<210> 100

<211> 71

<212> PRT

<213> Homo sapiens

<400> 100

Met Ala Ile Leu Gln Val Thr Ala Gly His Pro Pro Thr Met Val Gln
1 5 10 15

Gly Pro Ala Gly His Pro Pro Thr Met Val Gln Gly Pro Ala Gly Leu
20 25 30

Pro Leu Ala Met Ala Gln Val Thr His Pro Leu Val His Ile Thr Glu
35 40 45

Glu Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala
50 55 60

Gln Leu Thr Trp Asn Glu Ala
65 70